Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D1	2972140	14-Feb-1961	HIRSCH			
	D2	3157853	17-Nov-1964	HIRSCH			
	D3	3220121	30-Nov-1965	CUTLER			
	D4	3497668	24-Feb-1970	HIRSCH			
	D5	3517446	30-Jun-1970	CORLYON et al			
	D6	3623064	23-Nov-1971	KAGAN			
	D7	3875488	1-Apr-1975	CROCKER et al			
	D8	3902687	2-Sep-1975	HIGHTOWER			
	D9	3903614	9-Sep-1975	DIAMOND et al			
	D10	3911416	7-Oct-1975	FEDER			
	D11	3919691	11-Nov-1975	NOLL			
	D12	3923166	2-Dec-1975	FLETCHER et al			
	D13	4023290	17-May-1977	JOSEPHSON			
	D14	4101884	18-Jul-1978	BENTON, Jr			
	D15	4108146	22-Aug-1978	Golden			
	D16	4108164	22-Aug-1978	HALL, Sr.			
	D17	4127752	28-Nov-1978	LOWTHORP			
	D18	4160508	10-Jul-1979	SALISBURY			
	D19	4236325	2-Dec-1980	HALL et al			
	D20	4242823	6-Jan-1981	BRUNO			
	D21	4262549	21-Apr-1981	SCHWELLENBACH			
	D22	4333070	1-Jun-1982	BARNES			
	D23	4334280	8-Jun-1982	MCDONALD			

EXAMINER	DATE CONSIDERED		

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D24	4398889	16-Aug-1983	LAM et al			
	D25	4414537	8-Nov-1983	GRIMES			
	D26	4414984	15-Nov-1983	ZARUDIANSKY			
	D27	4436188	13-Mar-1984	JONES			
	D28	4464117	7-Aug-1984	FOREST			
	D29	4477043	16-Oct-1984	REPPERGER			
	D30	4484179	20-Nov-1984	KASDAY			
	D31	4484191	20-Nov-1984	VAVRA			
	D32	4513235	23-Apr-1985	ACKLAM et al			
	D33	4542375	17-Sep-1985	ALLES et al			
	D34	4545023	1-Oct-1985	MIZZI			
	D35	4550221	29-Oct-1985	MABUSTH			
	D36	4557275	10-Dec-1985	DEMPSEY, JR			
	D37	4560983	24-Dec-1985	WILLIAMS			
	D38	4581491	8-Apr-1986	BOOTHROYD			
	D39	4584625	22-Apr-1986	KELLOGG			
	D40	4599070	8-Jul-1986	HLADKY et al			
	D41	4603284	29-Jul-1986	PERZLEY			
	D42	4604016	5-Aug-1986	JOYCE			
	D43	4689449	25-Aug-1987	ROSEN			
	D44	4692756	8-Sep-1987	CLARK			
	D45	4706294	10-Nov-1987	OUCHIDA			
	D46	4708656	24-Nov-1987	DE VRIES et al			

EXAMINER	DATE CONSIDERED		

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D47	4713007	15-Dec-1987	ALBAN			
	D48	4715235	29-Dec-1987	FUKUI et al			
	D49	4757453	12-Jul-1988	NASIFF			
	D50	4758165	19-Jul-1988	TIEMAN et al			
	D51	4763356	9-Aug-1988	DAY, JR et al			
	D52	4772205	20-Sep-1988	CHLUMSKY et al			
	D53	4782327	1-Nov-1988	KLEY et al			
	D54	4791416	13-Dec-1988	ADLER			
	D55	4794384	27-Dec-1988	JACKSON			
	D56	4794392	27-Dec-1988	SELINKO			
	D57	4795296	3-Jan-1989	JAU			
	D58	4800721	31-Jan-1989	CEMENSKA et al			
	D59	4821030	11-Apr-1989	BATSON et al			
	D60	4823634	24-Apr-1989	CULVER			
	D61	4837734	6-Jun-1989	ICHIKAWA et al			
	D62	4839838	13-Jun-1989	LABICHE et al			
	D63	4853874	1-Aug-1989	IWAMOTO et al			
	D64	4861269	29-Aug-1989	MEENEN, JR.			
	D65	4868549	19-Sep-1989	AFFINITO et al			
	D66	4871992	3-Oct-1989	PETERSON			
	D67	4885565	5-Dec-1989	EMBACH			
	D68	4891764	2-Jan-1990	MCINTOSH			
	D69	4896554	30-Jan-1990	CULVER			

EXAMINER	DATE CONSIDERED		

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D70	4906843	6-Mar-1990	JONES et al			
	D71	4914624	3-Apr-1990	DUNTHORN			
	D72	4926879	22-May-1990	SEVRAIN et al			
	D73	4930770	5-Jun-1990	BAKER			
	D74	4934694	19-Jun-1990	MCINTOSH			
	D75	4935728	19-Jun-1990	KLEY			
	D76	4949119	14-Aug-1990	MONCRIEF et al			
	D77	4961038	2-Oct-1990	MACMINN			
	D78	4977298	11-Dec-1990	FUJIYAMA			
	D79	4983901	8-Jan-1991	LEHMER			
	D80	5004391	2-Apr-1991	BURDEA			
	D81	5007300	16-Apr-1991	SIVA			
	D82	5019761	28-May-1991	KRAFT			
	D83	5022384	11-Jun-1991	FREELS			
	D84	5022407	11-Jun-1991	HORCH et al			
	D85	5035242	30-Jul-1991	FRANKLIN			
	D86	5038089	6-Aug-1991	SZAKALY			
	D87	5044956	3-Sep-1991	BEHENSKY et al			
	D88	5065145	12-Nov-1991	PURCELL			
	D89	5076517	31-Dec-1991	FERRANTI et al			
	D90	5078152	7-Jan-1992	BOND			
	D91	5095303	10-Mar-1992	CLARK et al			
	D92	5103404	7-Apr-1992	MCINTOSH			

EXAMINER	DATE CONSIDERED

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D93	5107080	21-Apr-1992	ROSEN			
	D94	5107262	21-Apr-1992	CADOZ et al			
	D95	5116180	26-May-1992	FUNG et al			
	D96	5121091	9-Jun-1992	FUJIYAMA			
	D97	5133076	21-Jul-1992	HAWKINS et al			
	D98	5139261	18-Aug-1992	OPENIANO			
	D99	5143505	1-Sep-1992	BURDEA et al			
	D100	5146566	8-Sep-1992	HOLLIS, JR. et al			
	D101	5159159	27-Oct-1992	ASHER			
	D102	5165897	24-Nov-1992	JOHNSON			
	D103	5175459	29-Dec-1992	DANIAL et al			
	D104	5184319	2-Feb-1993	KRAMER			
	D105	5184868	9-Feb-1993	NISHIYAMA			
	D106	5185561	9-Feb-1993	GOOD et al			
	D107	5186629	16-Feb-1993	ROHEN			
	D108	5186695	16-Feb-1993	MANGSETH et al			
	D109	5189355	23-Feb-1993	LARKINS et al			
	D110	5193963	16-Mar-1993	MCAFFEE et al			
	D111	5197003	23-Mar-1993	MONCRIEF et al			
	D112	5203563	20-Apr-1993	LOPER, III			
	D113	5212473	18-May-1993	LOUIS			
	D114	5212473	18-May-1993	LOUIS			
	D115	5220260	15-Jun-1993	SCHULER			

EXAMINER	DATE CONSIDERED		

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D116	5223658	29-Jun-1993	SUZUKI			
	D117	5223776	29-Jun-1993	RADKE et al			
	D118	5235868	17-Aug-1993	CULVER			
	D119	5237327	17-Aug-1993	SAITOH et al			
	D120	5240417	31-Aug-1993	SMITHSON et al			
	D121	5262777	16-Nov-1993	LOW et al			
	D122	5264768	23-Nov-1993	GREGORY et al			
	D123	5270710	14-Dec-1993	GAULTIER et al			
	D124	5271290	21-Dec-1993	FISCHER			
	D125	5275174	4-Jan-1994	COOK			
	D126	5275565	4-Jan-1994	MONCRIEF			
	D127	5283970	8-Feb-1994	AIGNER			
	D128	5286203	15-Feb-1994	FULLER et al			
	D129	5296871	22-Mar-1994	PALEY			
	D130	5299810	5-Apr-1994	PIERCE			
	D131	5302132	12-Apr-1994	CORDER			
	D132	5309140	3-May-1994	EVERETT			
	D133	5313230	17-May-1994	VENOLIA et al			
	D134	5316017	31-May-1994	EDWARDS et al			
	D135	5334027	2-Aug-1994	WHERLOCK			
	D136	5341459	23-Aug-1994	BACKES			
	D137	5354162	11-Oct-1994	BURDEA et al			
	D138	5355148	11-Oct-1994	ANDERSON			

EXAMINER	DATE CONSIDERED

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D139	5376948	27-Dec-1994	ROBERTS et al			
	D140	5381080	10-Jan-1995	SCHNELL et al			
	D141	5389849	14-Feb-1995	ASANO et al			
	D142	5389849	14-Feb-1995	ASANO et al			
	D143	5389865	14-Feb-1995	JACOBUS et al			
	D144	5396266	7-Mar-1995	BRIMHALL			
	D145	5398044	14-Mar-1995	HILL			
	D146	5399091	21-Mar-1995	MITSUMOTO			
	D147	5405152	11-Apr-1995	KATANICS et al			
	D148	5414337	9-May-1995	SCHULER			
	D149	5432531	11-Jul-1995	CALDER et al			
	D150	5436622	25-Jul-1995	GUTMAN et al			
	D151	5437607	1-Aug-1995	TAYLOR			
	D152	5450613	12-Sep-1995	TAKAHARA et al			
	D153	5451924	19-Sep-1995	MASSIMINO et al			
	D154	5457479	10-Oct-1995	CHENG			
	D155	5459382	17-Oct-1995	JACOBUS et al			
	D156	5461711	24-Oct-1995	WANG et al			
	D157	5466213	14-Nov-1995	HOGAN			
	D158	5471571	28-Nov-1995	SMITH et al			
	D159	5473235	5-Dec-1995	LANCE et al			
	D160	5473344	5-Dec-1995	BACON et al			
	D161	5491477	13-Feb-1996	CLARK et al			

EXAMINER	DATE CONSIDERED
<u> </u>	

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D162	5506605	9-Apr-1996	PALEY			
	D163	5512919	30-Apr-1996	ARAKI			
	D164	5513100	30-Apr-1996	PARKER et al			
	D165	5521336	28-May-1996	BUCHANAN et al			
	D166	5530455	25-Jun-1996	GILLICK et al			
	D167	5542672	6-Aug-1996	MEREDITH			
	D168	5547382	20-Aug-1996	YAMASKI			
	D169	5557365	17-Sep-1996	OHSAWA			
	D170	5562707	8-Oct-1996	PROCHAZKA et al			
	D171	5563632	8-Oct-1996	ROBERTS			
	D172	5565887	15-Oct-1996	MCCAMBRIDGE et al			
	D173	5575761	19-Nov-1996	HAJIANPOUR			
	D174	5576727	19-Nov-1996	ROSENBERG et al			
	D175	5577981	26-Nov-1996	JARVIK			
	D176	5580251	3-Dec-1996	GILKES et al			
	D177	5583407	10-Dec-1996	YAMAGUCHI			
	D178	5587937	24-Dec-1996	MASSIE et al			
	D179	5589828	31-Dec-1996	ARMSTRONG			
	D180	5589854	31-Dec-1996	TSAI			
	D181	5591082	7-Jan-1997	JENSEN et al			
	D182	5596347	21-Jan-1997	ROBERTSON et al			
	D183	5600777	4-Feb-1997	WANG et al			
	D184	5619180	8-Apr-1997	MASSIMINO et al			

EXAMINER	DATE CONSIDERED

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D185	5625576	29-Apr-1997	MASSIE et al			
	D186	5629594	13-May-1997	JACOBUS et al			
	D187	5638060	10-Jun-1997	KATAOKA et al			
	D188	5642469	24-Jun-1997	HANNAFORD et al			
	D189	5643087	1-Jul-1997	MARCUS et al			
	D190	5656901	12-Aug-1997	KURITA			
	D191	5666138	9-Sep-1997	CULVER			
	D192	5666473	9-Sep-1997	WALLACE			
	D193	5670755	23-Sep-1997	KWON			
	D194	5690582	25-Nov-1997	ULRICH et al			
	D195	5691747	25-Nov-1997	AMANO			
	D196	5691898	25-Nov-1997	ROSENBERG et al			
	D197	5694013	2-Dec-1997	STEWART et al			
	D198	5699059	16-Dec-1997	HILLER			
	D199	5709219	20-Jan-1998	CHEN et			
	D200	5714978	3-Feb-1998	YAMANAKA			
	D201	5719561	17-Feb-1998	GONZALES			
	D202	5721566	24-Feb-1998	ROSENBERG et al			
	D203	5724106	3-Mar-1998	AUTRY et al			
	D204	5724278	3-Mar-1998	OHGOSE et al			
	D205	5729249	17-Mar-1998	YASUTAKE			
	D206	5731804	24-Mar-1998	ROSENBERG			
	D207	5732347	24-Mar-1998	BARTLE et al			

EXAMINER	DATE CONSIDERED		

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D208	5736978	7-Apr-1998	HASSER et al			
	D209	5739811	14-Apr-1998	ROSENBERG et al			
	D210	5742278	21-Apr-1998	CHEN et al			
	D211	5745715	28-Apr-1998	PICKOVER et al			
	D212	5748185	5-May-1998	STEPHAN et al			
	D213	5754023	19-May-1998	ROSTON et al			
	D214	5755577	26-May-1998	GILLIO			
	D215	5757358	26-May-1998	OSGA			
	D216	5760764	2-Jun-1998	MARTINELLI			
	D217	5766016	16-Jun-1998	SINCLAIR			
	D218	5767457	16-Jun-1998	GERPHEIDE et al			
	D219	5767839	16-Jun-1998	ROSENBERG			
	D220	5769640	23-Jun-1998	JACOBUS et al			
	D221	5771037	23-Jun-1998	JACKSON			
	D222	5781172	14-Jul-1998	ENGEL et al			
	D223	5784052	21-Jul-1998	KEYSON			
	D224	5785630	28-Jul-1998	BOBICK et al			
	D225	5790108	4-Aug-1998	SALCUDEAN			
	D226	5802353	1-Sep-1998	AVILA et al			
	D227	5804780	8-Sep-1998	BARTHA			
	D228	5805140	8-Sep-1998	ROSENBERG et al			
	D229	5805165	8-Sep-1998	THORNE, III et al			
	D230	5805416	8-Sep-1998	FRIEND et al			

EXAMINER	DATE CONSIDERED		

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D231	5808601	15-Sep-1998	LEAH et al			
	D232	5808603	15-Sep-1998	CHEN			
	D233	5821921	13-Oct-1998	OSBORN et al			
	D234	5823876	20-Oct-1998	UNBEHAND			
	D235	5825308	20-Oct-1998	ROSENBERG			
	D236	5828197	27-Oct-1998	MARTIN			
	D237	5828364	27-Oct-1998	SIDDIQUI			
	D238	5831408	3-Nov-1998	JACOBUS et al			
	D239	5832386	3-Nov-1998	NOJIMA et al			
	D240	5835080	10-Nov-1998	BEETSON etl al			
	D241	5844392	1-Dec-1998	PEURACH et al			
	D242	5844506	1-Dec-1998	BINSTEAD			
	D243	5877748	2-Mar-1999	REDLICH			
	D244	5880714	9-Mar-1999	ROSENBERG et al			
	D245	5887995	30-Mar-1999	HOLEHAN			
	D246	5889236	30-Mar-1999	GILLESPIE et al			
	D247	5889670	30-Mar-1999	SCHULER et al			
	D248	5896125	20-Apr-1999	NIEDZWIECKI			
	D249	5897437	27-Apr-1999	NISHIUMI et al			
	D250	5903257	11-May-1999	NISHIUMI et al			
	D251	5912661	15-Jun-1999	SIDDIQUI			
	D252	5914705	22-Jun-1999	JOHNSON et al			
	D253	5914708	22-Jun-1999	LEGRANGE et al			

EXAMINER	DATE CONSIDERED		

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D254	5929846	27-Jul-1999	ROSENBERG et al			
	D255	5942733	24-Aug-1999	ALLEN et al			
	D256	5943044	24-Aug-1999	MARTINTELLI et al			
	D257	5944151	31-Aug-1999	JAKOBS et al			
	D258	5953413	14-Sep-1999	PEYER et al			
	D259	5956016	21-Sep-1999	KUENZNER et al			
	D260	5959613	28-Sep-1999	ROSENBERG et al			
	D261	5973670	26-Oct-1999	BARBER et al			
	D262	5973689	26-Oct-1999	GALLERY			
	D263	5977867	2-Nov-1999	BLOUIN			
	D264	5977867	2-Nov-1999	BLOUIN			
	D265	5982304	9-Nov-1999	SELKER et al			
	D266	5982352	9-Nov-1999	PRYOR			
	D267	5984785	16-Nov-1999	TAKEDA et al			
	D268	5986643	16-Nov-1999	HARVILL et al			
	D269	5988902	23-Nov-1999	HOLEHAN			
	D270	5990869	23-Nov-1999	KUBICA et al			
	D271	5999168	7-Dec-1999	ROSENBERG et al			
	D272	6001014	14-Dec-1999	OGATA et al			
	D273	6004134	21-Dec-1999	MARCUS et al			
	D274	6005551	21-Dec-1999	OSBORNE et al			
	D275	6008800	28-Dec-1999	PRYOR			
	D276	6020876	1-Feb-2000	ROSENBERG et al			

EXAMINER	DATE CONSIDERED

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D277	6024576	15-Feb-2000	BEVIRT et al			
	D278	6037927	14-Mar-2000	ROSENBERG			
	D279	6061004	9-May-2000	ROSENBERG			
	D280	6067081	23-May-2000	HAHLGANSS et al			
	D281	6072475	6-Jun-2000	VAN KETWICH et al			
	D282	6081536	27-Jun-2000	GORSSUCH et al			
	D283	6088017	11-Jul-2000	TREMBLAY et al			
	D284	6088019	11-Jul-2000	ROSENBERG			
	D285	6094565	25-Jul-2000	ALBERTH et al			
	D286	6100874	8-Aug-2000	SCHENA et al			
	D287	6102803	15-Aug-2000	TAKEDA et al			
	D288	6110130	29-Aug-2000	KRAMER			
	D289	6111577	29-Aug-2000	ZILLES et al			
	D290	6118435	12-Sep-2000	FUJITA et al			
	D291	6125264	26-Sep-2000	WATANABE et al			
	D292	6125385	26-Sep-2000	WIES et al			
	D293	6128006	3-Oct-2000	ROSENBERG			
	D294	6140987	31-Oct-2000	STEIN et al			
	D295	6147422	14-Nov-2000	DELSON et al			
	D296	6147674	14-Nov-2000	ROSENBERG et al			
	D297	6151332	21-Nov-2000	GORSUCH et al			
	D298	6154201	28-Nov-2000	LEVIN et al			
	D299	6160489	12-Dec-2000	PERRY et al			

EXAMINER	DATE CONSIDERED		

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D300	6166723	26-Dec-2000	SCHENA et al			
	D301	6171191	9-Jan-2001	OGATA et al			
	D302	6178157	23-Jan-2001	BERG et al			
	D303	6184868	6-Feb-2001	SHAHOIAN			
	D304	6198206	6-Mar-2001	SAARMAA et al			
	D305	6215778	10-Apr-2001	LOMP et al			
	D306	6218966	17-Apr-2001	GOODWIN et al			
	D307	6219034	17-Apr-2001	ELBING et al			
	D308	6236647	22-May-2001	AMALFITANO			
	D309	6239790	29-May-2001	MARTINTELLI et al			
	D310	6243080	5-Jun-2001	MOLNE			
	D311	6262717	17-Jul-2001	DONOHUE et al			
	D312	6262718	17-Jul-2001	FINDLAY et al			
	D313	6300936	9-Oct-2001	BRAUN et al			
	D314	6307465	23-Oct-2001	KAYMA et al			
	D315	6323846	27-Nov-2001	WESTERMAN et al			
	D316	6326901	4-Dec-2001	GONZALES			
	D317	6332075	18-Dec-2001	VERDONK			
	D318	6373463	16-Apr-2002	BEEKS			
	D319	6388655	14-May-2002	LEUNG			
	D320	6388999	14-May-2002	GORSUCH et al			
	D321	6411198	25-Jun-2002	HIRAI et al			
	D322	6414674	2-Jul-2002	KAMPER et al			

EXAMINER	DATE CONSIDERED		

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D323	6415138	2-Jul-2002	SIROLA et al			
	D324	6418323	9-Jul-2002	BRIGHT et al			
	D325	6422941	23-Jul-2002	THORNER et al			
	D326	6424356	23-Jul-2002	CHANG et al			
	D327	6438390	20-Aug-2002	AWAN			
	D328	6438392	20-Aug-2002	TOBA			
	D329	6445284	3-Sep-2002	CRUZ-HERNANDEZ et al			
	D330	6447069	10-Sep-2002	TERRIS et al			
	D331	6448977	10-Sep-2002	BRAUN et al			
	D332	6469695	22-Oct-2002	WHITE			
	D333	6473069	29-Oct-2002	GERPHEIDE			
	D334	6487421	26-Nov-2002	HESS et al			
	D335	6509892	21-Jan-2003	COOPER et al			
	D336	6518958	11-Feb-2003	MIYAJIMA et al			
	D337	6529122	4-Mar-2003	MAGNUSSEN et al			
	D338	6535201	18-Mar-2003	COOPER et al			
	D339	6563487	13-May-2003	MARTIN			
	D340	6574489	3-Jun-2003	URIYA			
	D341	6606508	12-Aug-2003	BECKER et al			
	D342	6610936	26-Aug-2003	GILLESPIE et al			
	D343	6628195	30-Sep-2003	COUDON			
	D344	6636197	21-Oct-2003	GOLDENBERT et al			
	D345	6636202	21-Oct-2003	ISHMAEL, JR et al			

EXAMINER	DATE CONSIDERED

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D346	6639581	28-Oct-2003	MOORE			
	D347	6639582	28-Oct-2003	SHRADER			
	D348	6647145	11-Nov-2003	GAY			
	D349	6671618	30-Dec-2003	HOISKO			
	D350	6680729	20-Jan-2004	SHAHOIAN et al			
	D351	6690955	10-Feb-2004	KOMIYAMA			
	D352	6697043	24-Feb-2004	SHAHOIAN			
	D353	6723937	20-Apr-2004	ENGLEMANN et al			
	D354	6792294	14-Sep-2004	KUSHITA			
	D355	6822635	23-Nov-2004	SHAHOIAN et al			
	D356	6834373	21-Dec-2004	DIEBERGER			
	D357	6850150	1-Feb-2005	RONKAINEN			
	D358	6850781	1-Feb-2005	GOTO			
	D359	6876847	5-Apr-2005	KUDOH			
	D360	6882713	19-Apr-2005	SAKAI et al			
	D361	6944482	13-Sep-2005	ENGSTROM et al			
	D362	6963839	8-Nov-2005	OSTERMAN et al			
	D363	6982696	3-Jan-2006	SHAHOIAN			
	D364	7009595	7-Mar-2006	ROBERTS et al			
	D365	7061466	13-Jun-2006	MOORE			
	D366	7096045	22-Aug-2006	YOSHINAGA			
	D367	7103389	5-Sep-2006	SHIBATA			
	D368	7113177	26-Sep-2006	FRANZEN			

EXAMINER	DATE CONSIDERED

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D369	7149208	12-Dec-2006	MATTAWAY et al			
	D370	7151528	19-Dec-2006	TAYLOR et al			
	D371	7184765	27-Feb-2007	BIRNIE et al			
	D372	7215329	8-May-2007	YOSHIKAWA et al			
	D373	7218310	15-May-2007	TIERLING			
	D374	7225000	29-May-2007	KATAYANAGI			
	D375	7289796	30-Oct-2007	KUDOH			
	D376	7292227	6-Nov-2007	FUKUMOTO et al			
	D377	7312790	25-Dec-2007	SATO et al			
	D378	7328020	5-Feb-2008	MASUDA et al			
	D379	7336260	26-Feb-2008	MARTIN et al			
	D380	7336977	26-Feb-2008	KATAYANAGI			
	D381	7369115	6-May-2008	CRUZ-HERNANDEZ et al			
	D382	7373120	13-May-2008	MESSEL et al			
	D383	7424272	9-Sep-2008	HORIGUCHI			
	D384	7450110	11-Nov-2008	SHAHOIAN et al			
	D385	7463249	9-Dec-2008	KNOWLES et al			
	D386	7548232	16-Jun-2009	SHAHOIAN et al			
	D387	7728820	1-Jun-2010	ROSENBERG et al			
	D388	2001-0044328	22-Nov-2001	TSUKAMOTO			
	D389	2002-0039914	4-Apr-2002	HAMA et al			
	D390	2002-0111737	15-Aug-2002	HOISKO			
	D391	2003-0002682	2-Jan-2003	SMITH et al			

EXAMINER	DATE CONSIDERED

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **U.S. PATENT DOCUMENTS**

Examiner INITIAL	INDEX	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	FILING DATE
	D392	2003-0016211	23-Jan-2003	WOOLLEY			
	D393	2003-0022701	30-Jan-2003	GUPTA			
	D394	2003-0045266	6-Mar-2003	STASKAL et al			
	D395	2003-0048260	13-Mar-2003	MATUSIS			
	D396	2003-0058265	27-Mar-2003	ROBINSON et al			
	D397	2003-0071795	17-Apr-2003	BALDAUF et al			
	D398	2003-0095105	22-May-2003	VAANANEN			
	D399	2003-0128191	10-Jul-2003	STRASSER et al			
	D400	2003-0128192	10-Jul-2003	Van Os			
	D401	2003-0184574	2-Oct-2003	PHILLIPS et al			
	D402	2004/0203656	14-Oct-2004	ANDREW et al			
	D403	2004-0067780	8-Apr-2004	EIDEN			
	D404	2006-0248183	2-Nov-2006	BARTON			
	D405	2007-0299478	4-Oct-2007	ROSENBERG et al			
	D406	2008-0068350	20-Mar-2008	ROSENBERG et al			

#### **FOREIGN PATENT DOCUMENTS**

Examiner INITIAL	INDEX	COUNTRY	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	TRANSL	ATION
*	D407		DE 19911416 US equivalent 6626358	2-Nov-2000	BREIMESSER et al				
*	D408		EP 0062664	20-Oct-1982	BUCKNAM				
*	D409		EP 0085518	10-Aug-1983	HILL et al				
*	D410		EP 0265011	27-Apr-1988	MEES et al				

EXAMINER	DATE CONSIDERED	

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **FOREIGN PATENT DOCUMENTS**

Examiner INITIAL	INDEX	COUNTRY	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	TRANSLATION
*	D411		EP 0349086	3-Jan-1990	VISSER			
*	D412		EP 0556999	27-May-1998	NCR International, Inc. WINDSOR			
*	D413		EP 0607580	27-Jul-1994	SELKER			
*	D414		EP 0626634	30-Nov-1994	DOYAMA et al			
*	D415		EP 0875819	4-Nov-1998	OSBORNE et al			
*	D416		EP 1182851	27-Feb-2002	BECKER			
*	D417		JP 01-003664	19-Jul-1990				
*	D418		JP 02-109714	13-Jan-1992				
*	D419		JP 04-007371	3-Aug-1993				
*	D420		JP 05-020226	12-Mar-1993				
*	D421		JP 05-193862	27-Jan-1995	Sega Corporation			
*	D422		JP 06-018341	25-Jan-1994	NONAKA			
*	D423		JP 06-139018	20-May-1994	TSUCHIKANE et al			
*	D424		JP 06-265991 US equivalent 5557365	22-Sep-1994	OSAWA			
*	D425		JP 07-064723	10-Mar-1995	NAWATA			
*	D426		JP 07-113703	2-May-1995	NONAKA			
*	D427		JP 07-266263	17-Oct-1995	ASANO et al			
*	D428		JP 10-105337	24-Apr-1998	HAHLGANS et al			
*	D429		JP 11-085400	30-Mar-1999	OGASAWARA et al			
*	D430		JP 11-338629	10-Dec-1999	MATSUDAIRA			
*	D431		JP 2001-350592	21-Dec-2001	Ryo et al			

EXAMINER	DATE CONSIDERED
	the MDED C CCC. Does those the station of control

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

#### **FOREIGN PATENT DOCUMENTS**

Examiner INITIAL	INDEX	COUNTRY	DOCUMENT	DATE	FIRST INVENTOR'S LAST NAME	CLASS	SUB.	TRANSLATION
*	D432		JP 2002-259059 A	13-Sep-2002	Motoyama et al			
*	D433		JP 63-164127	26-Oct-1988				
*	D434		JPU 2511577	9-Jul-1996				
*	D435		WO 1992/00559	9-Jan-1992	GEMMEL et al			
*	D436		WO 1995/32459	30-Nov-1995	MARCUS et al.			
*	D437		WO 1996/28777	19-Sep-1996	KEYSON			
*	D438		WO 1997/020305	5-Jun-1997	TREMBLAY et al.			
*	D439		WO 1997/12357	3-Apr-1997	ROSENBERG et al			
*	D440		WO 1997/18546	22-May-1997	GERPHEIDE			
*	D441		WO 1997/21160	12-Jun-1997	ROSENBERG et al			
*	D442		WO 1997/31333	28-Aug-1997	TOMER			
*	D443		WO 1998/08159	26-Feb-1998	KUBICA et al.			
*	D444		WO 1998/24183	4-Jun-1998	SCHENA et al			
*	D445		WO 1998/58323	23-Dec-1998	ROSENBEG et al			
*	D446		WO 1999/40504	12-Aug-1999	BARON et al			
*	D447		WO 2000/003319	20-Jan-2000	WARREN et al			
*	D448		WO 2000/21071	13-Apr-2000	SHAHOIAN et al			
*	D449		WO 2002/12991	14-Feb-2002	FUKUMOTO et al			
*	D450		WO 2002/27645	4-Apr-2002	FRANZEN			
*	D451		WO 2002/31807	18-Apr-2002	HWANG et al			

#### **OTHER DOCUMENTS**

EXAMINER	DATE CONSIDERED			
Initial if a citation is considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in				
conformance and not considered. Include a copy of this form with the next communication to applicant.				
Form SB/08 (modified)	SHEET 20 OF 29			

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

Examiner INITIAL	INDEX	CITATION		
*	D452	Adachi et al., "Sensory Evaluation of Virtual Haptic Push-Buttons," 1994, Suzuki Motor Corp., pp. 1-7.		
*	D453	ADELSTEIN, "A Virtual Environment System For The Study of Human Arm Tremor," Ph.D. Dissertation, Dept. of Mechanical Engineering, MIT, June 1989.		
*	D454	ADELSTEIN, "Design and Implementation of a Force Reflecting Manipulandum for Manual Control research," DSC-Vol. 42, Advances in Robotics, Edited by H. Kazerooni, pp. 1-12, 1992.		
*	D455	Adelstein, et al., "A High Performance Two-Degree-of-Freedom Kinesthetic Interface," MIT, 1992, pp. 108-112.		
*	D456	Akamatsu et al., "Multimodal Mouse: A Mouse-Type Device with Tactile and Force Display," 1994, Presence vol. 3, pp. 73-80.		
*	D457	Atkinson et al., "Computing with Feeling,", Comput. & Graphics, vol. 2, 1977, pp. 97-103.		
*	D458	AUKSTAKALNIS et al., "Silicon Mirage: The Art and Science of Virtual Reality," ISBN 0-938151-82-7, pp. 129- 180, 1992.		
*	D459	BAIGRIE, "Electric Control Loading - A Low Cost, High Performance Alternative," Proceedings, pp. 247-254, November 6-8, 1990.		
*	D460	Batter et al., "Grope-1: A computer Display to the sense of Feel," Proc IFIP Congress, 1971, pp. 759-763.		
*	D461	BEJCZY, "Generalization of Bilateral Force-Reflecting Control of Manipulators," Proceedings Of Fourth CISM- IFToMM, Sep. 8-12, 1981.		
*	D462	BEJCZY, "Sensors, Controls, and Man-Machine Interface for Advanced Teleoperation," Science, Vol. 208, No. 4450, pp. 1327-1335, 1980.		
*	D463	BEJCZY et al., "A Laboratory Breadboard System For Dual-Arm Teleoperation," SOAR '89 Workshop, JSC, Houston, TX, July 25-27, 1989.		
*	D464	BEJCZY et al., "Kinesthetic Coupling Between Operator and Remote Manipulator," International Computer Technology Conference, The American Society of Mechanical Engineers, San Francisco, CA, August 12-15, 1980.		
*	D465	BEJCZY, et al., "Universal Computer Control System (UCCS) For Space Telerobots," CH2413- 3/87/0000/0318501.00 1987 IEEE, 1987.		
*	D466	Bejezy et al., "The Phantom Robot: Predictive Displays for Teleoperation with Time Delay," IEEE CH2876, Jan. 1990, pp. 546-550.		
*	D467	Bliss, James C., "Optical-to-Tactile Image Conversion for the Blind," IEEE Transactions on Man-Machine Systems, Volume MMS-11, no. 1, 1970, pp. 58-65.		
*	D468	Bolanowski, S.J. et al., "Four Channels Mediate the Mechanical Aspects of Touch," J. Acoust. Soc. Am. 84 Volume 84 (5), November 1988, pp. 1680-1694.		
*	D469	BROOKS et al., "Hand Controllers for Teleoperation - A State-of-the-Art Technology Survey and Evaluation," JPL Publication 85-11; NASA-CR-175890; N85-28559, pp. 1-84, 03/1/1985.		

EXAMINER	DATE CONSIDERED
Initial if a citation is considered, whether or not citation is in conformance w	
conformance and not considered. Include a copy of this form with the next comm	nunication to applicant.
Form SB/08 (modified)	SHEET 21 OF 29

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

Examiner INITIAL	INDEX	CITATION		
*	D470	Brooks, Jr. et al., "Project GROPE, Haptic Displays for Scientific Visualization,", Computer Graphics, vol. 24, #4, 1990, pp. 177-184.		
*	D471	BURDEA et al., "Distributed Virtual Force Feedback, Lecture Notes for Workshop on Force Display in Virtual Environments and its Application to Robotic Teleoperation," 1993 IEEE International Conference on Robotics and Automation, pp. 25-44, 05/02/1993.		
*	D472	BUTTOLO et al., "Pen-based force Display for Precision Manipulation in Virtual Environments," IEEE 0-8186-7084-3, 1995, pp. 217-224.		
*	D473	CALDER, "Design of A Force-Feedback Touch-Introducing Actuator For Teleoperator Robot Control," Bachelor of Science Thesis, MIT, June 23, 1983.		
*	D474	CALDWELL et al., "Enhanced Tactile Feedback (Tele-Taction) Using a Multi-Functional Sensory System," 1050-4729/93, pp. 955-960, 1993.		
*	D475	CHANG "Audio-Haptic Feedback in Mobile Phones", Proceedings of AMC CHI 2005 Conference on Human Factors in Computing Systems, April 2-7, 2005, Portland, Oregon, pp. 1264-1267, 2005		
*	D476	Colgate et al., "Implementation of Stiff Virtual Walls in Force-Reflecting Interfaces," Northwestern University, IL, 1993., pp. 1-8.		
*	D477	Dennerlein et al., "Vibrotactile Feedback for Industrial Telemanipulators," 1997, Sixth Annual Symp. On Haptic Interfaces for Virtual Env. And Teleoperator Systems, ASME IMECE, Dallas, pp. 1-7.		
*	D478	Dennerlein, Jack et al., "Commercialization of Vibrotactile Feedback for Telemanipulation and Virtual Environments," 1997, Phase I Final Report for ONR Contract N00014-96-C-0325 (not published or publicly available).		
*	D479	Durlach, Nathaniel I. ET AL, "Virtual REALITY: Scientific and Technological Challenges", National Academy Press, Washington, DC 1995 pp. 160-205		
*	D480	Eberhardt, Silvio P. et al., "Inducing Dynamic Haptic Perception by the Hand: System Description and Some Results," Proceedings of ASME Dynamic Systems and Control, Vol. DSC-55-1, No. 1, 1994, pp. 345-351.		

EXAMINER	DATE CONSIDERED
Initial if a citation is considered, whether or not citation is in conformance with conformance and not considered. Include a copy of this form with the part comm	o o

conformance and not considered. Include a copy of this form with the next communication to applicant.

Form SB/08 (modified)

WCSR 4362968v1

INCODMATION DISCLOSURE
INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

Examiner INITIAL	INDEX	CITATION				
*	D481	Eberhardt, Silvio P. et al., "OMAR - A Haptic Display for Speech Perception by Deaf and Deaf-Blind Individuals," IEEE 1993, pp. 195-201.				
*	D482	Ellis et al., Design & Evaluation of a High-Performance Prototype Planar Haptic Interface, Dec. 1993, Advances in Robotics, 55-64.				
*	D483	Fischer, et al., "Specification and Design of Input Devices for Teleoperation," IEEE CH2876, Jan. 1990, pp. 540-545.				
*	D484	FOKUMOTO, "Active Click: Tactile Feedback For Touch Panels," ACM CHI2001 Extended Abstracts, pp. 121- 122, April 2001.				
*	D485	Frisken-Gibson, Sarah F. et al, "A 64-Solenoid, Four-Level Fingertip Search Display for the Blind," IEEE Transactions on Biomedical Engineering, Vol. BME-34, No. 12, December 1987, pp. 963-965.				
*	D486	FUKUHARA ET AL, Voice Café: Conversation Support System in a Gourp, 2001, IOS Press, Pages 334 and 335				
*	D487	GOBEL et al., "Tactile Feedback Applied to Computer Mice," International Journal of Human-Computer Interaction, Vol. 7, No. 1, pp. 1-24, 1995.				
*	D488	Goldstein, Moise H. et al., "Tactile Aids for the Profoundly Deaf Child," 77 J. Acoust. Soc. Am 77 (1), January 1985, pp. 258-265.				
*	D489	GOTOW et al., " Controlled Impedance Test Apparatus for Studying Human Interpretation of Kinesthetic Feedback," WA11-11:00, pp. 332-337				
*	D490	Gotow et al., "Perception of Mechanical Properties at the Man—Machine Interface," IEEE CH2503-1, 1987, pp. 688-690.				
*	D491	Hannaford et al., "Force-Feedback Cursor Control," NASA Tech Briefs, vol. 13, No. 11, 1989, pp. 1-7.				
*	D492	Hannaford et al., "Performance Evaluation of a 6-Axis Generalized Force-Reflecting Teleoperator," IEEE Transactions on Systems, Man, and Cybernetics, vol. 21, No. 3, 1991, pp. 621-623, 631-633.				
*	D493	Hasser, C., "Tactile Feedback for a Force-Reflecting Haptic Display," School of Eng., Univ. of Dayton, Dayton, OH, 1995, pp. 1-98.				
*	D494	Hasser, C. et al., "Tactile Feedback with Adaptive Controller for a Force-Reflecting Haptic Display," Parts 1 and 2, IEEE 0-7803-3131-1, 1996, pp. 526-533.				
*	D495	Hirota et al., "Development of Surface Display," IEEE 0-7803-1363-1, 1993, pp. 256-262.				

EXAMINER	DATE CONSIDERED			
Initial if a citation is considered, whether or not citation is in conformance wit conformance and not considered. Include a copy of this form with the next comm		citation	if no	t in
Form SB/08 (modified)		ET 23	OF	29

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

Application No.:	10/538,161		
Filing Date:	June 19, 2006		
First Named Inventor	Danny A. GRANT et al		
Art Unit	2629		
Confirmation No.	3262		
Examiner Name:	MOON, SEOKYUN		
Attorney Docket No.:	IMM152D / I103 1940US.3		

Examiner INITIAL	INDEX	CITATION		
*	D496	HOWE, "A Force-Reflecting Teleoperated Hand System for the Study of Tactile Sensing in Precision Manipulation," Proceedings of the 1992 IEEE International Conference on Robotics and Automation, Nice, France, May 1992.		
*	D497	Howe et al., "Task Performance w/ a dextrous Teleoperated Hand System," Proc. of SPIE, vol. 1833, 1992, pp. 1-9.		
*	D498	IBM Technical Disclosure Bulletin, "Mouse Ball-Actuating Device With Force and Tactile Feedback," Vol. 32, No. 9B, February 1990.		
*	D499	IWATA, "Pen-based Haptic Virtual Environment," 0-7803-1363-1/93 IEEE, pp 287-292, 1993.		
*	D500	lwata, Hiroo, "Artificial Reality with Force-feedback: Development of Desktop Virtual Space with Compact Master Manipulator," Computer Graphics, vol. 24, No. 4, Aug. 1990, pp. 165-170.		
*	D501	JACKSON, K. M., "Linerity of Radio-Frequency Transducers", Medical and Biological Engineering and Computer, July 1977, pp. 446-449		
*	D502	JACOBSEN et al., "High Performance, Dextrous Telerobotic Manipulator With Force Reflection," InterventiorVROV '91 Conference & Exposition, Hollywood, Florida, May 21-23, 1991.		
*	D503	JOHNSON, David A., "Shape-Memory Alloy Tactile Feedback Actuator," Armstrong Aerospace Medical Research Laboratory, AAMRL-TR-90-039, August 1990. (Tini Allow Company, Inc., August 1990, 2 pages, pp. i-33)		
*	D504	JONES et al., "A perceptual analysis of stiffness," ISSN 0014-4819 Springer International (Springer-Verlag); Experimental Brain Research, Vol. 79, No. 1, pp. 150-156, 1990.		
*	D505	Kaczmarek, K. A. et al. "Tactile Displays," in: Virtual Environments and Advanced Interface Design, New York: Oxford University Press, 1995, pp. 349-414.		
*	D506	Kaczmarek, Kurt A. et al, "Electrotactile and Vibrotactile Displays for Sensory Substitution Systems", IEEE Transactions on Biomedical Engineering, Vol. 38, No. 1, January 1991, pp. 1-16.		
*	D507	Kelley et al., "MagicMouse: Tactile and Kinesthetic Feedback in the Human—Computer Interface using an Electromagnetically Actuated Input/Output Device," Oct. 19, 1993 University of British Columbia pp. 1-27.		
*	D508	Kolloy et al. "On the Development of a Force Foodback Mouse and its Integration into a graphical user Interface." Nov		
*	D509	Kilpatrick et al., "The Use of Kinesthetic Supplement in an Interactive Graphics System," University of North Carolina, 1976, pp. 1-172.		
*	D510	KONTARINIS et al., "Display of High-Frequency Tactile Information to Teleoperators," Telemanipulator Technology and Space Telerobotics, Won S. Kim, Editor, Proc. SPIE Vol. 2057, pp. 40-50, Sep. 7-9, 1993.		
*	D511	KONTARINIS et al., "Tactile Display of Vibratory Information in Teleoperation and Virtual Environments," PRESENCE, 4(4):387-402, 1995.		

EXAMINER	DATE CONSIDERED					
Initial if a citation is considered, whether or not citation is in conformance will conformance and not considered. Include a copy of this form with the next comm			through	citation	if no	t in
Form SB/08 (modified)	аточно аррпо	, and	SHEE	T 24	OF	29

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

Application No.:	10/538,161	
Filing Date:	June 19, 2006	
First Named Inventor	Danny A. GRANT et al	
Art Unit	2629	
Confirmation No.	3262	
Examiner Name:	MOON, SEOKYUN	
Attorney Docket No.:	IMM152D / I103 1940US.3	

Examiner INITIAL	INDEX	CITATION	
*	D512	Kotoku, "A Predictive Display with Force Feedback and its Application to Remote Manipulation System with Transmission Time Delay," Proc. of IEEE/RSJ Int'l Conf. On Intelligent Robots and Systems, Jul. 1992.	
*	* D513 Kotoku, et al., "Environment Modeling for the Interactive Display (EMID) Used in Telerobotic Systems," IEEE/RSJ I Workshop on Intelligent Robots and Systems, Nov. 1991, pp. 999-1004.		
*	D514	LAKE, "Cyberman from Logitech," GameBytes, 1994.	
*	D515	"Cyberman Technical Specification," Logitech Cyberman SWIFT Supplement, 4/5/1994. cited by other.	
*	D516	MARCUS, "Touch Feedback in Surgery," Proceedings of Virtual Reality and Medicine The Cutting Edge, Sep. 8- 11, 1994.	
*	D517	MCAFFEE ET AL, 'Teleoperator Subsystem/Telerobot Demonstrator: Force Reflecting Hand Controller Equipment Manual," JPL D-5172, pp. 1- 50, A1-A36, B1-B5, C1-C36, January 1988.	
*	D518	Millman et al., "Design of a 4 Degree of Freedom Force-Reflecting Manipulandum with a Specified Force/Torque Workspace," IEEE CH2969-4, 1991, pp. 1488-1493.	
*	D519	MINSKY, "Computational Haptics: The Sandpaper System for Synthesizing Texture for a Force-Feedback Display," Ph.D. Dissertation, MIT, June 1995.	
*	D520	Minsky et al., "Feeling & Seeing:Issues in Force Display," ACM089791-351-5, 1990, pp. 235-242, 270.	
*	D521	Munch et al., "Intelligent Control for Haptic Displays," Eurographics '96, vol. 15, No. 3, 1996, pp. 217-226.	
*	D522	Noll, "Man-Machine Tactile," SID Journal, Jul./Aug. 1972 Issue.	

EXAMINER	DATE CONSIDERED
Initial if a citation is considered, whether or not citation is in conformance wi	th MPEP § 609. Draw line through citation if not in

conformance and not considered. Include a copy of this form with the next communication to applicant.

Form SB/08 (modified)

WCSR 4362968v1

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application No.:	10/538,161		
Filing Date:	June 19, 2006		
First Named Inventor	Danny A. GRANT et al		
Art Unit	2629		
Confirmation No.	3262		
Examiner Name:	MOON, SEOKYUN		
Attorney Docket No.:	IMM152D / I103 1940US.3		

Examiner INITIAL	INDEX	CITATION	
*	D523	OUH-YOUNG, "Force Display in Molecular Docking," Order No. 9034744, p. 1-369, 1990.	
*	D524	OUH-YOUNG, "A Low-Cost Force Feedback Joystick and Its Use in PC Video Games," IEEE Transactions on Consumer Electronics, Vol. 41, No. 3, August 1995.	
*	D525	OUH-YOUNG et al., "The Development of A Low-Cost Force Feedback Joystick and Its Use in the Virtual Reality Environment," Proceedings of the Third Pacific Conference on Computer Graphics and Applications, Pacific Graphics '95, Seoul, Korea, 21-24 August 1995.	
*	D526	Ouh-Young et al., "Creating an Illusion of Feel: Control Issues in Force Display," Univ. of N. Carolina, 1989, pp. 1-14.	
*	D527	Ouh-young, et al., Using a Manipulator for Force Display in Molecular Docking, IEEE CH2555, 1988, pp. 1824-1829.	
*	D528	PATRICK et al., "Design and Testing of A Non-reactive, Fingertip, Tactile Display for Interaction with Remote Environments," Cooperative Intelligent Robotics in Space, Rui J. deFigueiredo et al., Editor, Proc. SPIE Vol. 1387, pp. 215-222, 1990.	
*	D529	PATRICK, "Design, Construction, and Testing of a Fingertip Tactile Display for Interaction with Virtual and Remote Environments," Master of Science Thesis, MIT, Nov. 8, 1990.	
*	D530	Payette et al., "Evaluation of a Force Feedback (Haptic) Computer Printing Device in Zero Gravity," Oct. 17, 1996, ASME Dynamics Systems, vol. 58 pp. 547-553.	
*	D531	Peine, W.J., "Tactile Shape Displays for Small Scale Shape Feedback," http://www.hrl.harvard.eduk-peine/display. htm 1998, pp. 1-2.	
*	D532	PIMENTEL et al., 'Virtual Reality: through the new looking glass," 2nd Edition; McGraw-Hill, ISBN 0-07-050167-X, pp. 41-202, 1994.	
*	D533	Rabinowitz, W. M. et al., "Multidimensional Tactile Displays: Identification of Vibratory Intensity, Frequency, and Contactor Area," J. Acoust. Soc. Am. 82 (4), October 1987, pp. 1243-1252.	

EXAMINER	DATE CONSIDERED
Initial if a citation is considered, whether or not citation is in conformance w	

conformance and not considered. Include a copy of this form with the next communication to applicant.

Form SB/08 (modified)

WCSR 4362968v1

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

Application No.:	10/538,161		
Filing Date:	June 19, 2006		
First Named Inventor	Danny A. GRANT et al		
Art Unit	2629		
Confirmation No.	3262		
Examiner Name:	MOON, SEOKYUN		
Attorney Docket No.:	IMM152D / I103 1940US.3		

Examiner INITIAL	INDEX	CITATION		
*	D534	Ramstein, Christophe, "Combining Haptic and Braille Technologies: Design Issues and Pilot Study," Assets '96, 2 Annual ACM Conference on Assistive Technologies, ACM SIGRAPH, Apr. 1996, pp. 37-44.		
*	D535	RAMSTEIN et al., "The Pantograph: A Large Workspace Haptic Device for a Multimodal Human—Computer Interaction," Computer—Human Interaction, CHI 1994, pp. 1-3.		
*	D536	Dissertation, Stanford University, June 1994		
*	D537	Rosenberg, L., "Virtual fixtures as tools to enhance operator performance in telepresence environments," SPIE Manipulator Technology, 1993, pp. 1-12.		
*	D538	Rosenberg et al., "A Force Feedback Programming Primer," Immersion Corp., 1997, pp. 1-176.		
*	Armstrong Laboratory, AL/CF-TR-1997-0016, 1996, pp. 1-33.			
*	D540	in virtual Reality, 1993, pp. 1-8.		
*	* D541 Rosenberg et al., "The use of force feedback to enhance graphical user interfaces," Stereoscopic Displays & \Reality Systems, 1996, pp. 243-248.			
*	Rosenberg, "Perceptual Design of a Virtual Rigid Surface Contact," Armstrong Laboratory AL/CF-TR-1995-0029, 1 pp. 1-45.			
*	D543 Rosenberg, "Virtual Haptic Overlays Enhance Performance in Telepresence Tasks," Dept. of Mech. Eng., Stanford Univ., 1994.			
*	* D544 Rosenberg, et al., "The Use of Force Feedback to Enhance Graphical User Interfaces," Proc. SPIE 2653, 1990 243-248.			
*	* D545 RUSSO, "Controlling Dissipative Magnetic Particle Brakes in Force Reflective Devices," DSC-Vol. 42, Advance Robotics, pp. 63-70, ASME 1992.			
*	* D546 RUSSO, "The Design and Implementation of a Three Degree of Freedom Force Output Joystick," MIT Libraries Archives 08/14/1990, pp. 1-131, May 1990.			
*	D547 SCANNELL, "Taking a Joystick Ride," Computer Currents, Boston Edition, Vol. 9, No. 11, November 1994.			
*	D548	SCHMULT et al., "Application Areas for a Force-Feedback Joystick," 1993, Advances in Robotics, vol. 49, pp. 47-54.		
*	D549	"Component Maintenance Manual with Illustrated Parts List, Coaxial Shaker Part No. C-25502", Safe Flight Instrument Corporation, Revised 28 Jan 2002 (3 pages)		

EXAMINER	DATE CONSIDERED					
Initial if a citation is considered, whether or not citation is in conformance with	th MPEP § 609.	Draw line	through	citation	if nc	t in
conformance and not considered. Include a copy of this form with the next comm	unication to applic	ant.				
Form SB/08 (modified)			SHEE	T 27	OF	29

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application No.:	10/538,161
Filing Date:	June 19, 2006
First Named Inventor	Danny A. GRANT et al
Art Unit	2629
Confirmation No.	3262
Examiner Name:	MOON, SEOKYUN
Attorney Docket No.:	IMM152D / I103 1940US.3

Examiner INITIAL	INDEX	CITATION	
*	D550	"Technical Manual Overhaul Instructions With Parts Breakdown, Coaxial Control Shaker Part No. C-25502", Safe Flight Instrument Corporation, revised 15 July 1980 (23 pages)	
*	* D551 Safe Flight Instruments Corporation, "Coaxial Control Shaker,' Part No. C-25502, 1 July 1967.		
*	* D552 SHIMOGA, "Finger Force and Touch Feedback Issues in Dexterous Telemanipulation," Proceedings of Fourth Al Conference on Intelligent Robotic Systems for Space Exploration, Rensselaer Polytechnic Institute, Sep. 30 - Oc 1992.		
*	D553	Force Feedback Touch Panel, Represented by CSC Division, Sales Department, SIXIK Corporation, Tokyo, Japan, www.smk.co.jp. cited by other .	
*	D554	SMK Corporation, "Force Feedback Type Optical Touch Panel Developed," SMK Corporation Website, October 30, 2002	
*	* SMK Corporation, "Multi-Functional Touch Panel, Force-Feedback Type, Developed: A Touch Panel Providing a Clicking Feeling," http://www.smk.co.jp/whatsnew_e/628csc_e.html, September. 30, 2002.		
*	D556	D556 SNOW et al., "Model-X Force-Reflecting-Hand-Controller," NT Control No. MPO-17851; JPL Case No. 5348, pp. 1-06/15/1989.	
*	D557	STANLEY et al., "Computer Simulation of Interacting Dynamic Mechanical Systems Using Distributed Memory Parallel Processors," DSC-Vol. 42, Advances in Robotics, pp. 55-61, ASME 1992.	
*	D558	SU et al., "The Virtual Panel Architectures: A 3D Gesture Framework," University of Maryland, pp. 387-393.	
*	D559	TADROS, "Control System Design for a Three Degree of Freedom Virtual Environment Simulator Using Motor/Brake Pair Actuators", MIT Archive © Massachusetts Institute of Technology, pp. 1-88, February 1990.	
*	D560	TAN et al., "Manual Resolution of Compliance When Work and Force Cues are Minimized," DSC-vol. 49, Advances in Robotics, Mechatronics, and Haptic Interfaces, ASME 1993, pp. 99-104.	

EXAMINER	DATE CONSIDERED	
Initial if a citation is considered, whether or not citation is in conformance wi	ith MPEP § 609. Draw line through citation if not in	
conformance and not considered. Include a copy of this form with the next communication to applicant.		

conformance and not considered. Include a copy of this form with the next communication to applicant.

SHEET 28 OF 29

INFORMATION DISCLOSURE
STATEMENT BY APPLICANT

Application No.:	10/538,161	
Filing Date:	June 19, 2006	
First Named Inventor	Danny A. GRANT et al	
Art Unit	2629	
Confirmation No.	3262	
Examiner Name:	MOON, SEOKYUN	
Attorney Docket No.:	IMM152D / I103 1940US.3	

Examiner INITIAL	INDEX	CITATION	
*	D561	TERRY et al., "Tactile Feedback In A Computer Mouse," Proceedings of Fourteenth Annual Northeast Broengineenng Conference, University of New Hampshire, March 10-11, 1988.	
*	D562	WIKER, "Teletouch Display Development: Phase 1 Report," Technical Report 1230, Naval Ocean Systems Center, San Diego, Apr. 17, 1989. cited by other.	
*	D563	Wiker, Steven F., "Teletouch Display Development: Phase 1 Report," Naval Ocean Systems Center, Technical Report 1230, July 1988, 66 pages.	
*	D564	Wiker, Steven F. et al., "Development of Tactile Mice for Blind Access to Computers: Importance of Stimulation Locus, Object Size, and Vibrotactile Display Resolution," Proceedings of the Human Factors Society 35th Annual Meeting, 1991, pp. 708-712.	
*	D565	WINEY III, "Computer Stimulated Visual & Tactile Feedback as an Aid to Manipulator & Vehicle Control," MIT, 1981, pp. 1-79.	
*	D566	YAMAKITA et al., "Tele-Virtual Reality of Dynamic Mechanical Model," Proc. of IEEE/RSJ Int'l Conf. On Intelligent Robots and Systems, Jul. 1992, pp. 1103-1110.	
*	D567	YOKOKOJI, et al., "What You Can See is What You Can Feel—Development of a Visual/Haptic Interface to Virtual Environment," Proc. VRAIS 1996.	
*	D568	YOKOKOJI et al., "What you can see is what you can feel," IEEE 0-8186-7295-1, 1996, pp. 46-54.	
*	D569	IPRP PCT/US2005/036861 mailed 02/23/2006	
*	D570	ISR/WO - PCT/US2005/036861 mailed 02/23/2006	

EXAMINER	DATE CONSIDERED	
Initial if a citation is considered, whether or not citation is in conformance wit	h MPEP § 609.	Draw line through citation if not in

conformance and not considered. Include a copy of this form with the next communication to applicant.

Form SB/08 (modified)

WCSR 4362968v1